# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* The client, DriverPass owner Liam, wants to fill a niche in the driving training market
* We want to provide DriverPass with the system to better train potential drivers with digital tools

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* DriverPass wants to make getting a drivers license easier with digital tools
* Helps fix the difficulty of passing a driver’s test
* The system creates and grades online practice tests for the students
* The system sets up in person driving practice
* The system tracks progress of the students
* The system allows online access to data and user control by the company’s employees
* The system updates with DMV changes to requirements

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* The system will have a student take an online test, automatically grade it, and give the results
* The system will take a reservation for in person driving practice, with the appropriate package allowance, online or over the phone
* The system will take the reservation and connect the student with a driver
* The system will record the results from the driving practice
* The system will allow editing, exporting and importing of files and data online to the owner, Liam
* The system will track user activity, like making/cancelling reservations, and report the activity to the company
* The system will allow the IT department to have full access over accounts to edit passwords and client access
* The system should allow packages to be disabled if no longer offered
* The system should notify the company if the DMV issues new requirements for the driving test

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* Work on any browser, Chrome, Firefox, etc.
* The system doesn’t have a hard need for lightning fast updates, but should be quick enough to update information within a few minutes at maximum
* The system should update every time an action is taken, or when the DOT updates requirements

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* The system should run on a cloud computing and database platform, as the company is small, doesn’t need much information, allows portability, and quick scaling
* If that isn’t an option, a standard Linux backend server and database would probably be best

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Customers would be asked to make a profile with a username and password
* Admin will have their own special logins to access backend features
* The password would be case sensitive to increase security
* If a username attempts too many logins in a short amount of time that should alert admins
* If a user (especially an admin user) that is inactive suddenly becomes active again, that should alert admins as well

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Changes should be able to be made without having to modify the codebase
* When updates are pushed, all accounts should be logged out to make sure nobody is logged in the old system
* The admins need to be able to modify, edit, download information, and search databases
* The admins also need to be able to edit, delete, or create users and their information

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* The users should have a public username and private password
* All communication between the client side and server side should be encrypted
* If a user attemps login too many times in a short window the account should be locked
* If an account is locked or if a user forgets their password they should be able to reactivate it by getting a reactivation/new password email or by calling customer service who can reactivate or reset the password

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall validate user credentials when logging in
* The system shall allow users to take a practice online test
* The system shall provide a link for or display on the hompage the users progress and history
* The stystem shall allow clients to schedule a in person driving test either online or by talking with a representive
* The system shall connect the clients with the divers to take a practice driving test
* The system shall allow clients to select and pay for a services package
* The system shall record all activity in the system into databases, like client progress, system and client information modifications
* The system shall allow admin users to modify customer data, and work with database information

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The two types of users are the clients and admins
* The clients need to be able to view their information and progress, their online tests, practice driving reservations, driving notes, special needs, the drivers photo, and their photo
* The admins need to be able view and work with the client information database, the system edits database, driver information database, along with their own information.
* The system will be mostly worked on the desktop/laptop web browsers
* The system should be accessible to mobile browsers as well, but with limited features

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* We assume that cars and driving tests will still be a thing after completing the project
* We assume that the internet will still be a viable environment for online businesses
* We assume there will be enough resources to implement the project

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* The business is small, with a limited team
* The business doesn’t have much physical infrastructure for servers and databases

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

